

ORIGINAL

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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JUN 13 1997

Federal Communications Commission  
Office of Secretary

In the Matter of )

Advanced Television Systems )  
and Their Impact Upon the )  
Existing Television Broadcast )  
Service )

MM Docket No. 87-268

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To: The Commission

**PETITION FOR RECONSIDERATION**

Jefferson-Pilot Communications Company ("Jefferson-Pilot"), licensee of WWBT(TV), Channel 12, Richmond, Virginia, by its attorneys and pursuant to Section 1.429 of the Commission's rules, hereby respectfully requests reconsideration of the Commission's Sixth Report and Order ("Sixth R&Q"), FCC 97-115, released April 21, 1997, 62 Fed. Reg. 26684 (May 14, 1997), insofar as it allocates and assigns paired channel 54 to WWBT for digital television ("DTV") service.<sup>1</sup>

<sup>1</sup> Throughout the course of the above-captioned proceeding, the Commission has made several modifications to its proposals for advanced television and to the DTV Table of Allotments, now set forth in Appendix B to the Sixth R&Q. Accordingly, the impact of the assignment of DTV channel 54 to WWBT could not be fully analyzed prior to the release of the Sixth R&Q. Moreover, the unavailability of OET Bulletin No. 69 has prevented Jefferson-Pilot from fully assessing alternative DTV channel assignments. In view of Jefferson-Pilot's lack of a meaningful opportunity to address its specific DTV channel allotment previously, and the important public interest issues raised herein, Jefferson-Pilot submits that it has standing to file this petition for reconsideration pursuant to Section 1.429 of the Commission's rules.

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Station WWBT currently operates on NTSC channel 12. In the DTV Table of Allotments contained in Appendix B to the Sixth R&O, the Commission has allotted DTV channel 54 to WWBT. Appended hereto as Attachment 1 is an engineering statement indicating that, based upon the information currently available, DTV channel 11 may be used for WWBT's digital operations instead of channel 54. However, the Office of Engineering and Technology Bulletin No. 69 ("OET Bulletin No. 69"), which is to publicly clarify the Commission's methodology for evaluating coverage areas and interference, is not yet available. Without examining OET Bulletin No. 69 or other definitive guidance as to the FCC's interference criteria, it is impossible for Jefferson-Pilot to determine with certainty all of the implications of substituting channel 11 for channel 54. Accordingly, Jefferson-Pilot respectfully requests that it be allowed a reasonable amount of time following the release of OET Bulletin No. 69 to supplement this petition with a full engineering study demonstrating that its proposed channel change complies with the DTV rules.<sup>2</sup>

Jefferson-Pilot fully supports the Commission's efforts to bring digital television service to the public. Granting this request for authorization to use DTV channel 11 in lieu of channel 54 for WWBT's digital operations, however, would serve the public interest in several respects. First, the change would allow Jefferson-Pilot to avoid the business planning uncertainties inherent in the use of channel 54, which is outside the DTV "core spectrum" regardless of which

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<sup>2</sup> Jefferson-Pilot is prepared to work with the Commission's staff to fashion modifications to WWBT's DTV operating parameters in order to address interference issues that use of channel 11 might raise. However, should the licensee's engineering studies conclude that channel 11 would not be suitable for WWBT digital broadcasts even with modified operating parameters, Jefferson-Pilot would withdraw its petition in the expectation that its assignment to channel 54 for the DTV transition period would be unaffected.

channels ultimately constitute the final digital TV band.<sup>3</sup> Consequently, maintenance of the channel 54 assignment would force WWBT to relocate its digital operations to a channel within the core spectrum at the end of the DTV transition period. Given its current understanding of the FCC's plans for final DTV channel assignments, Jefferson-Pilot expects that it would opt to move its digital operations to channel 12 at the end of the transition period.<sup>4</sup> If required to use DTV channel 54 for the transition, WWBT would be forced to purchase not just one but two digital transmitters in the near future — a UHF digital transmitter for DTV broadcasts during the transition period and a VHF digital transmitter for DTV broadcasts after the transition period ends.

Furthermore, use of channel 54 presents significant engineering difficulties for WWBT because of the age and location of its current antenna tower. The licensee advises the undersigned that the current tower facility, which was constructed in 1956, is not structurally strong enough to bear the weight of the heavy transmission line needed for operating channel 54. Moreover, buildings surrounding the site may preclude the installation of upgraded tower facilities. As a result, WWBT may be required to find a new site for the channel 54 antenna, with the additional expense and likely delays that attend such endeavors.

However, the allotment of DTV channel 11 for WWBT's digital operations would resolve these difficulties. Use of channel 11 — which is within the core spectrum — would allow WWBT to colocate its DTV antenna on the same tower with its NTSC antenna. The

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<sup>3</sup> At the end of the DTV transition period, the Commission intends to locate all DTV channels within a "core spectrum" of either channels 2-46 or 7-51. See Sixth R&O at ¶ 83.

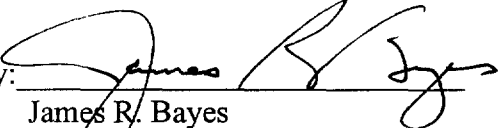
<sup>4</sup> See Sixth R&O at ¶¶ 36, 40, 84.

smaller transmission line needed for channel 11 operations can be more safely accommodated on WWBT's 41-year-old tower, and Jefferson-Pilot expects that colocation will allow WWBT to address any interference issues that may arise from the adjacent channel operations. Use of channel 11 for DTV operations also will eliminate the need for acquiring a UHF digital transmitter that would be rendered useless at the end of the transition period, when Jefferson-Pilot intends to move WWBT's digital operations to channel 12. Because authorization to use channel 11 would be more efficient in terms of both time and money, Jefferson-Pilot anticipates that it would be able to bring digital service to its audience more quickly than would be the case if WWBT were required to use channel 54 for the transition period.

Accordingly, Jefferson-Pilot respectfully requests reconsideration of the Sixth R&O to the extent it allocates DTV channel 54 to WWBT, and urges the Commission to amend the DTV Table of Allotments and assign channel 11 to WWBT instead.

Respectfully submitted,

JEFFERSON-PILOT COMMUNICATIONS  
COMPANY

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June 13, 1997

**DENNY & ASSOCIATES, P.C.**  
**CONSULTING ENGINEERS**  
**WASHINGTON, DC**

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**ENGINEERING EXHIBIT  
IN SUPPORT OF A  
PETITION FOR RECONSIDERATION  
MM DOCKET NO. 87-268  
JEFFERSON-PILOT COMMUNICATIONS COMPANY  
WWBT(TV)  
RICHMOND, VIRGINIA**

**ENGINEERING STATEMENT**

This engineering exhibit has been prepared on behalf of Jefferson-Pilot Communications Company (Jefferson-Pilot), licensee of commercial television station WWBT, Richmond, Virginia, in support of a Petition for Reconsideration in MM Docket No. 87-268. Specifically, Jefferson-Pilot requests that DTV channel 11 be allotted to Richmond, Virginia, in lieu of the DTV channel 54 allotment made in Table 1 of the *Sixth Report and Order* in the above reference docket. A brief discussion of the basis for this request follows.

WWBT is licensed to operate on channel 12 (204-210 megahertz (MHz)) with effective radiated power (ERP) of 316 kilowatts (kW) and antenna radiation center height above average terrain (HAAT) of 241 meters. Table 1 of the *Sixth Report and Order* specifies a channel 54 (710-716 MHz) DTV allotment for WWBT with ERP of 1000 kW and antenna radiation center HAAT

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**WASHINGTON, DC**

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Engineering Statement  
Richmond, Virginia

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of 241 meters. At the end of the transition period when NTSC transmission ceases, Jefferson-Pilot plans to revert to channel 12 for DTV WWBT transmission as DTV channel 54 is outside the DTV core spectrum.

WWBT is in a unique position in that more than one DTV channel is available for its use, and, of the other available channels, channel 11 (198-204 MHz), the first lower adjacent channel to the WWBT NTSC channel 12 assignment, is available for use at Richmond, Virginia.<sup>1</sup> Use of channel 11 in lieu of channel 54 is preferred by Jefferson-Pilot because it will limit the cost and speed the implementation of DTV transmission at WWBT. Further, use of channel 11 now instead of channel 54 will facilitate WWBT's return to channel 12 at the end of the transition period. Finally, use of channel 11 by WWBT for DTV transmission will make channel 54 available for use elsewhere until the end of the transition period.

Using the methodology contained in Appendix B of the *Sixth Report and Order* and taking into account the proposed use of channel 11 for DTV, the

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<sup>1</sup> The Maximum Service Television, Inc. (MSTV) list of other available DTV channels shows that channel 11 is available for use at Richmond, Virginia.

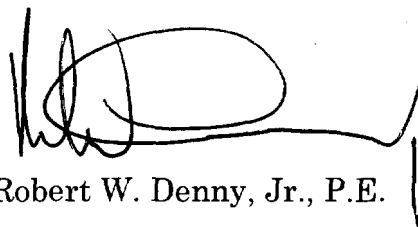
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Engineering Statement  
Richmond, Virginia

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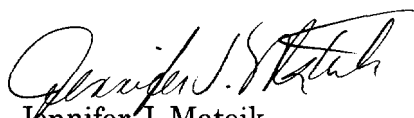
DTV ERP of 12.6 kW was found to virtually replicate the licensed WWBT Grade B (56 dB $\mu$ ) contour. Thus, Jefferson-Pilot requests that the FCC substitute DTV channel 11 with the associated ERP of 12.6 kW and antenna radiation center HAAT of 241 meters for the current DTV channel 54 assignment. If the FCC grants this request, Jefferson-Pilot will commence DTV transmission on channel 11 at Richmond, Virginia, at the earliest date possible.

Figure 1 of this exhibit shows the predicted WWBT DTV coverage that would be achieved on DTV channel 54 at Richmond with 1000 kW ERP and 241 meters HAAT, and Figure 2 of this exhibit shows the predicted WWBT DTV coverage that would be achieved of DTV channel 11 at Richmond with 12.6 kW ERP and 241 meters HAAT. Figures 1 and 2 show that the service area provided by the proposed channel 11 allotment is comparable to that provided by the channel 54 allotment.



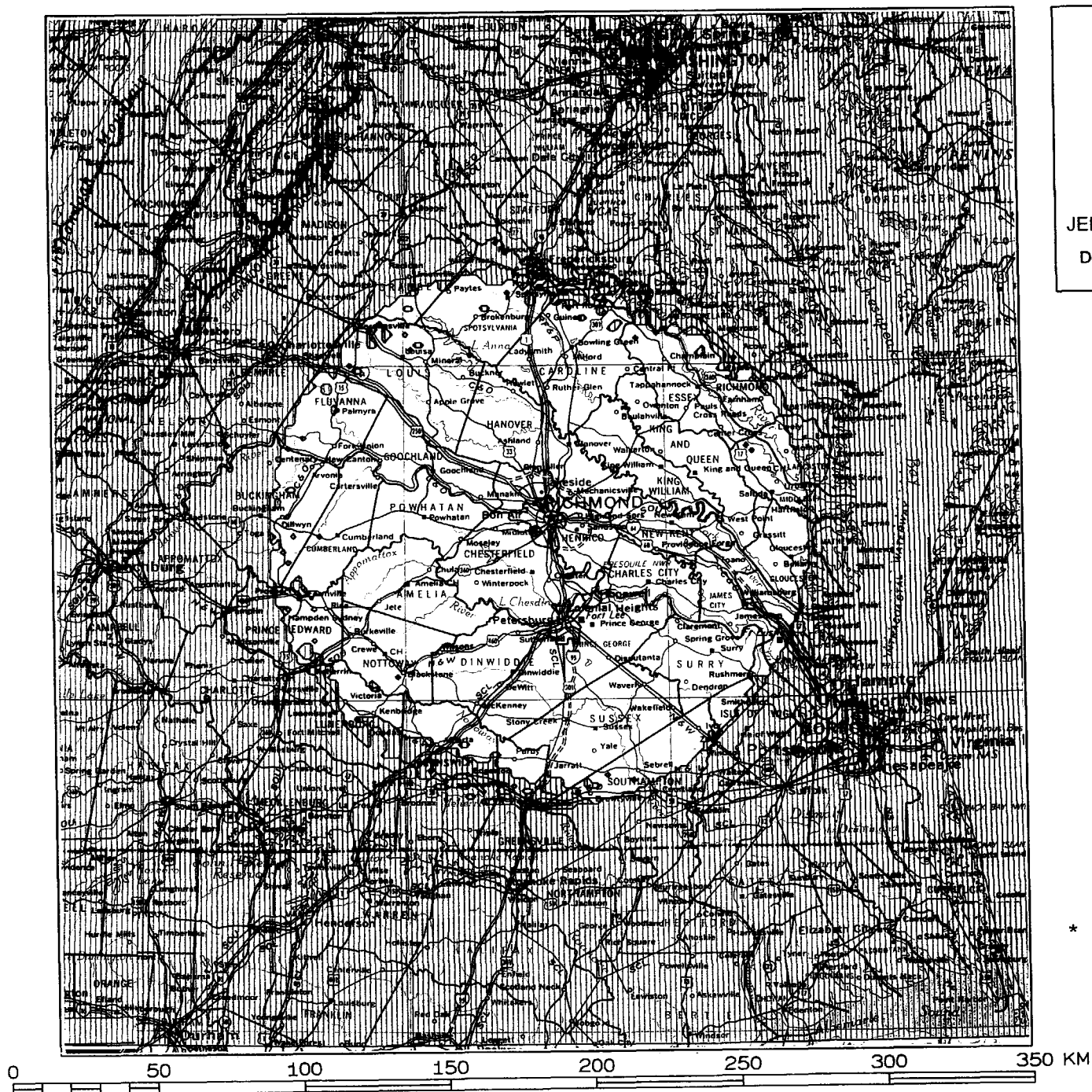
Robert W. Denny, Jr., P.E.

Subscribed and sworn to before me this 13<sup>th</sup> day of June, 1997.



Jennifer J. Mateik  
Notary Public, District of Columbia  
My commission expires June 30, 2001

Figure 2



# PREDICTED COVERAGE\*

WWBT (DTV)

RICHMOND, VIRGINIA

CH 11 12.6 KW 241 METERS

Prepared for

JEFFERSON-PILOT COMMUNICATIONS CO.

Denny & Associates, P.C. Consulting Engineers

## Signal to Interference Ratio

No Interference  
 Area: 24640. sq km  
 Population: 1173000.  
 Households: 439000.

## HDTV Interference

Area: 0. sq km  
 Population: 0.  
 Households: 0.

NTSC Interference  
 Area: 1690. sq km  
 Population: 57000.  
 Households: 20000.

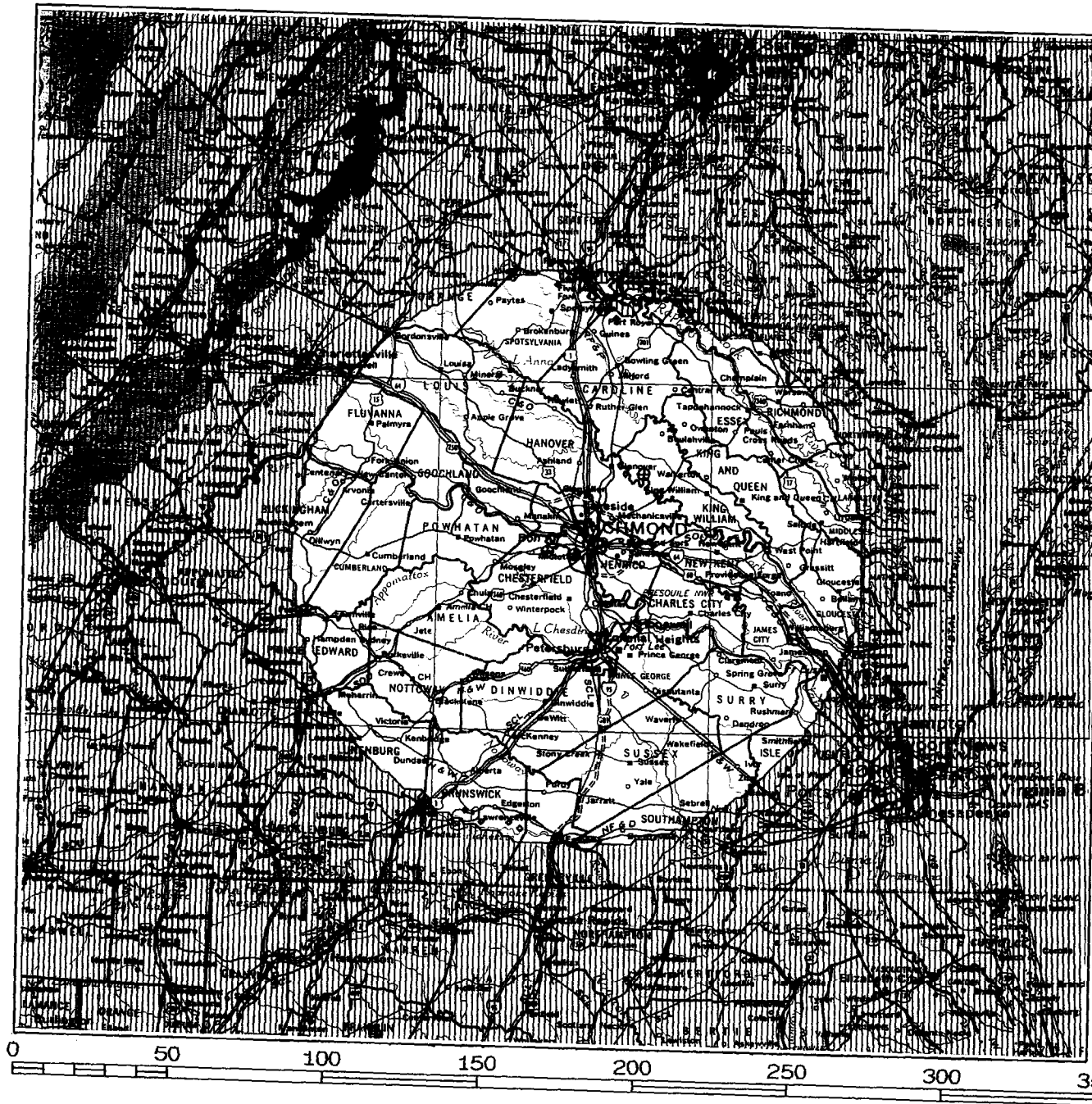
Signal Strength Below  
 Receiver Noise Threshold

\* Computation based on ITS Irregular Terrain Model for 50% confidence factor with results clipped at the limit of the predicted Grade B contour.

MAY 1997



Figure 1



**PREDICTED COVERAGE\***

**WWBT (DTV)**

**RICHMOND, VIRGINIA**

**CH 54 1000 KW (MAX-BT) 241 METERS**

Prepared for

**JEFFERSON-PILOT COMMUNICATIONS CO.**

Denny & Associates, P.C. Consulting Engineers

**Signal to Interference Ratio**

□ No Interference  
Area: 26440. sq km  
Population: 1217000.  
Households: 455000.

HDTV Interference  
Area: 20. sq km  
Population: 0.  
Households: 0.

■ NTSC Interference  
Area: 390. sq km  
Population: 28000.  
Households: 10000.

■ Signal Strength Below  
Receiver Noise Threshold

\* Computation based on ITS Irregular Terrain Model for 50% confidence factor with results clipped at the limit of the predicted Grade B contour.

MAY 1997